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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,124	03/11/2004	Takanori Nakayama	501.43619X00	4661
20457	7590	02/13/2008	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			AMADIZ, RODNEY	
1300 NORTH SEVENTEENTH STREET			ART UNIT	PAPER NUMBER
SUITE 1800			2629	
ARLINGTON, VA 22209-3873			MAIL DATE	DELIVERY MODE
			02/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/797,124	NAKAYAMA ET AL.
	Examiner	Art Unit
	Rodney Amadiz	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 March 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

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Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date 1/31/08.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 1 is objected to because of the following informalities: Please amend lines 7-8 as follows:

—(a) the an average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when the a signal amplitude of the—

Appropriate correction is required.

Claim 7 is objected to because of the following informalities: Please amend lines 7-11 as follows:

—(a) an average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when the a display gray scale of the video signal falls in a range from a minimum value to a first value,

(b) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is decreased when the a signal amplitude of the video signal—

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 18 is a method claim; however, there are no steps to be accomplished nor are there methods present in the claim. Furthermore, the claim does not describe how the ranges were found nor does it have a means for performing the increases/decrease of the average value positive/negative side gray scale.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 7 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 7 are apparatus claims; however, other than the preamble, there are no structural limitations, only functional limitations. There is no explanation as to how the average value positive/negative side gray scale voltage increases/decrease.

Furthermore, there is no explanation as to what device increases/decreases the average value positive/negative side gray scale voltage. Since claims 1 and 7 have no structural limitations, they are considered indefinite.

Claim 18 is a method claim; however, there are no steps or methods recited. There is no explanation as to how the average value positive/negative side gray scale voltage increases/decrease. Furthermore, there is no explanation as to what means increases/decreases the average value positive/negative side gray scale voltage. Since claim 18 has no method steps, it is indefinite.

Claims 2-6 and 8-17 depend from claims 1 and 7 and are therefore also rejected.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kamei et al.	U.S. Patent 5,640,174
Sato et al.	U.S. Patent 5,751,267
Matsueda et al.	U.S. Patent 6,384,806
Nakanishi et al.	U.S. Patent 6,570,549
Miyajima et al.	U.S. Patent 7,002,543
Kudo et al.	U.S. Patent 7,023,458
Shigeta	U.S. Patent 7,079,129
Kudo et al.	U.S. Patent 7,193,637

Ozaki	USPPGPUB 2003/001553
Yamano et al.	USPPGPUB 2004/0066363
Ogawa et al.	USPPGPUB 2004/0164943
Kudo et al.	USPPGPUB 2006/0033695
Huang et al.	USPPGPUB 2006/0164687
Kumagai et al.	USPPGPUB 2007/0002188

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.A.

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1/31/08
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